ADDITIONS TO THE AVIFAUNA OF THE PRIBILOF ISLANDS, ALASKA, INCLUDING FOUR SPECIES NEW TO NORTH AMERICA.

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THE Pribilof Islands are perhaps more favorably situated for intensive biological study than any other place in our Arctic possessions. They lie near the center of Bering Sea where there is a very prolific development of marine life. They are the home of the famous Alaska fur seal and the seat of extensive Government establishments for the care of the skins of these animals. Good facilities exist for field collecting in almost all branches of biology and much detailed study might be done with the equipment and laboratories that are maintained there.

Ornithology is especially interesting in the region because of the enormous numbers of sea birds. Various employees of the Government have given the subject more or less attention and several large collections have been made. Whenever even a comparatively small amount of collecting has been done, some unusual visitors have been discovered. The permanent bird population, comprising breeders and regular migrants, numbers but 35 species, of which 21 have been found nesting, while the migrants and accidental stragglers which have been secured or observed have swelled the list to 129 species, including those reported in this paper. Of this number specimens have been collected of all excepting 6, and the U.S. National Museum contains specimens of all which have been collected excepting one. The stragglers come from all directions, at all seasons, and it appears that the end of the list may not be reached until practically all of the avifauna of Northwestern America and Northeastern Asia shall have been recorded. No less than 13 new records for North America have been made here. Some remarkable and unexpected visitors have landed, such as the northern flicker, Japanese cuckoo, Japanese haw finch, Kamchatkan pine grosbeak, brambling, and Kamchatkan sea eagle.

¹This list was first given before the Biological Society of Washington and a short reveiw containing the names of the additions was published in the Journal of the Washington Academy of Sciences, Vol. IX, No. 6. (cf. Auk 1919, p. 443.)

No less remarkable is the absence of some expected species such as the northern raven, a common bird on islands both north and south of these.

It seems most probable that these rare visitors have been lost birds. They seem to have been blown from their regular courses of flight and upon finding the Pribilofs, have landed there at the particular time when some one was prepared to secure the record. It is very probable that many of them would have perished had they not found this land, and the list may be taken as an indication of the great numbers of birds which must be lost at sea. And if the number of species which has been secured bears any relation to the total number which has actually visited the islands then it seems certain that a few years of intensive ornithological study would result in the addition of many more records. This is true because it must be admitted that the unusual species thus far secured have been obtained largely through accident. William Palmer spent the summer of 1890 in collecting birds, but otherwise no one has devoted more than a very small fraction of his time and energy to this work.

I have spent six summers and four winters on the Islands and my last visit extended from June, 1916, to September, 1918. During this period 22 new records for the Islands have been made from specimens collected, five of which represent birds which had not hitherto been reported within the boundaries of North America. One of the latter, the Kamchatkan pine grosbeak, was secured by Mr. A. H. Proctor on St. George Island and has already been recorded.¹ The remaining 21 species are listed below.

In addition to the specimens which represent new records several other very interesting species were collected or observed which seem to deserve mention. Two specimens of the ivory gull and one of Ross's gull were secured on St. George Island. An ancient murrelet and a Savannah sparrow were taken on St. Paul Island for what appears to be the first time although they had been previously reported. A European widgeon, a pomarine jaeger, and a wheatear were taken on the latter island. They had previously been collected but once. Two specimens of the dark

¹Riley, J. H., Auk, Vol. 34, p. 210, April, 1917.

phase of Rodger's fulmar were preserved. These birds are often seen in the large colonies which breed on the Pribilofs. They seem to mate indiscriminately with light colored birds and in one case a slate-colored downy young was seen which had light colored parents. It does not seem likely that the colonies consist of more than one species. A little wren succeeded in getting from St. George to St. Paul Island in 1914. The species was completely exterminated at the former place during the winter of 1916–17 by gyrfalcons. Another probably from Otter Island was found during the summer of 1918.

In the identification of the specimens and the correcting of names I have received much assistance from H. C. Oberholser, C. W. Richmond, E. A. Preble, and J. H. Riley, to all of whom I wish to express my grateful appreciation.

NEW RECORDS FOR NORTH AMERICA AND THE PRIBILOF ISLANDS.

Eunetta falcata (Georgi). FALCATED TEAL.—A male of this beautiful crested teal was secured on St. George Island, April 18, 1917. Its gorgeous coloration was admired by all who saw it. The native hunters there do not readily distinguish the several species of ducks and this was called by them "Mallard," which name is applied to at least eight separate kinds.

Heteroscelus brevipes (Vieillot). POLYNESIAN TATTLER.—The history of the Polynesian Tattler in North America dates back to October 4, 1911, when a female was secured on St. Paul Island by Mr. M. C. Marsh, then the naturalist of the fur-seal service. The specimen was placed in the National Museum collection without being detected as differing from the wandering tattler. It was discovered by Dr. H. C. Oberholser while he was verifying the identification of a second specimen of the same species, a female collected on St. Paul Island, September 2, 1917, by the writer. Owing to the difficulty of distinguishing the tattlers it may be that the Asiatic form comes across Bering Sea more frequently than the records would indicate.

Thalassoaetus pelagicus (Pallas). KAMCHATKAN SEA EAGLE.—A bird of this species was shot and wounded on St. Paul Island, December 15, 1917, but fell into the sea. Five days later it was picked up on the beach in badly decomposed condition. Enough of the specimen could be saved however to enable the identification to be made in the National Museum. The species has been reported from the Aleutian Islands before, but the record was not accepted by the American Ornithologists' Union because specimens were not secured to make the identification positive. Eagles have been seen on the Pribilofs several times but they probably in most cases belong to the species which Palmer has recorded

[Auk [April (Fur Seals and Fur Seal Islands of the North Pacific Ocean, Pt. 3, 418, 1898) the Northern Bald Eagle, which is abundant on the Aleutian Islands, 200 miles south.

Anthus spinoletta japonicus Temminek and Schlegel. JAPANESE PIPIT.—A female Japanese Pipit was secured on St. Paul Island on August 29, 1916. I have found that pipits are regular fall migrants at the Islands but heretofore all those collected have been the common North American subspecies, *Anthus spinoletta rubescens*. If a large series were secured it is possible other forms might often be found.

Species New to the Pribilof Islands only.

Brachyramphus marmoratus (Gmelin). MARBLED MURRELET.— A Marbled Murrelet was collected at St. Paul Island, January 13, 1918. It was a very unexpected visitor. The ancient murrelet was recorded from the Islands about 50 years ago and had not been subsequently observed. It was the one which was naturally looked for because it is a common bird in Bering Sea. It was a great surprise therefore that the form which lives south of the Aleutian Islands should be found at the Pribilofs in mid-winter. Later, April 18, 1918, a specimen of *Synthliboramphus antiquus* was secured.

Puffinus tenuirostris (Temminck). SLENDER-BILLED SHEARWATER. A female Slender-billed Shearwater was picked up on the beach of St. Paul Island on June 4, 1918. Another bird was seen shortly after, flying about two miles out at sea. Mr. C. E. Crompton told me that numerous individuals were seen in the vicinity of St. George Island at about the same time.

Chen hyperborea hyperborea (Pallas). LESSER SNOW GOOSE.—A male was secured on St. Paul Island, September 16, 1916. Ordinarily natives are prohibited from using firearms on the Pribilofs during the time when the fur seals are there but on that day a man telephoned to the village from North East Point, twelve miles distant, that there was some kind of a large white bird in a pond near by. Thinking perhaps a swan was seen and knowing the desirability of specimens in order to determine if any Asiatic species visit the Islands he was instructed to shoot the bird and bring it in. But this snow goose is what he brought. Another bird was killed the following year on the same island but since it belonged clearly to the same species and time did not permit of its preparation it was not preserved.

Branta canadensis hutchinsii (Riehardson). HUTCHIN'S GOOSE.— A female of this subspecies was shot and preserved on St. Paul Island, May 12, 1918. It is considerably larger than the cackling goose which ordinarily come to the islands each spring and fall, and unlike the latter form there is no sharp demarcation in the coloration of the under parts.

Arctonetta fischeri Brandt. SpectacLed EIDER.—Three female Spectacled Eiders were secured at St. Paul Island on January 13, 1918, by native hunters. They did not recognize them as belonging to a separate species from the pacific and king eiders with which they were associated, and since the natives must be depended upon by the collector to a large extent for sea ducks it is likely the birds come more frequently than has been suspected. It would seem natural for individuals to pass in the vicinity of the Pribilofs each year because they have been reported in winter as far south as the Aleutian Islands. One of the birds collected was preserved in formalin for anatomical study.

Melanitta deglandi dixoni (Brooks). WESTERN WHITE-WINGED SCOTER.—Four specimens of the Western White-winged Scoter have been taken on the Pribilofs during the last three years. All were females but this was merely an accidental circumstance because males have been seen. The first specimen was secured on October 30, 1916, at St. George Island by the writer. The next was taken on November 15, 1916, at the same island by Dr. H. P. Adams, formerly physician of the U. S. Bureau of Fisheries. Another was secured at St. George Island on February 4, 1917, and one at St. Paul Island, February 8, 1918, both by the writer.

The species is of regular occurence about the islands in winter. It has been seen on several occasions before any specimens were secured but was not recorded because positive specific identification could not be made. The natives recognize the bird as belonging to a different species from the eiders with which it comes and associates. The birds feed along shore just outside of the surf line in small flocks. The white speculum of the wing makes them excellent targets for the man with the shot gun out after fresh meat in the dim light of the arctic winter morning.

Aristonetta valisineria (Wilson). CANVAS-BACK.—A beautiful male Canvas-back was taken on St. George Island on May 18, 1917. The Pochard, which is difficult for the average hunter to distinguish from this, has been taken on the island but once so both species must be considered as rare visitors. However the natives are inclined to call all ducks "Mallards," when the females have a general resemblance to that species and the males are brightly colored. Thus Pin-tails, Buffle-heads, Goldeneyes, and other river ducks are very apt to be reported as Mallards unless the collector makes a personal examination of each bird secured. Probably the inability to identify the ducks has prevented the securing of many desirable specimens here in the past and delayed the reporting of others until recently.

Clangula clangula americana Bonaparte. AMERICAN GOLDEN-EYE. Two specimens which clearly belong to this subspecies were collected; a male on St. George Island, May 6, 1917; and a female on St. Paul Island January 31, 1918. From a study of female specimens collected in the fall of 1913, it is certain that there is a mingling of the European and American forms in the vicinity of the Pribilofs.

Nettion crecca (Linnaeus). EUROPEAN TEAL.—With the capture of a male and female European Teal on St. Paul Island, May 4, 1918, a per-

plexing question regarding the avifauna was settled. The American teal was recorded in 1898 but no specimens were collected. Subsequently it was found that the European form was frequently found in the Aleutian Islands and it was a question whether the bird seen on St. George by William Palmer in 1890 had not been this. Further complications entered into the case in 1914, when Mr. Edward A. Preble and I collected a female and her unfledged young on St. Paul Island. They could not be identified as the one or the other species. But on May 10, 1917, a fine male of the American form was secured on St. George Island. Then when the European was found we knew definitely that both species migrate through the islands. But until some way is found to distinguish the females of the two forms it will not be known which one stopped on St. Paul to nest in 1914.

Haematopus bachmanii Audubon. BLACK OYSTER-CATCHER.—An adult male of this strange bird was shot on the beach of St. George Island, January 12, 1917. Why it should have come up here in the middle of the winter cannot be stated; it is another instance of the peculiar movements of birds in this region. Other species have done the same thing. The Aleutian Sandpiper goes north regularly in the winter and has been secured on the Islands several times. Once it was found on the drift ice. The Aleutian Song Sparrow came to St. George in the winter of 1913-14. It is possible that these birds arrived in the fall and had remained until they were secured later in the year but it hardly seems possible that so striking a form as *Haematopus* would have escaped detection by sharp native eyes for very long.

There is good reason to suspect that this species has been shot on St. George Island before. One native told me he had given a bird like it to a Doctor Mills several years earlier but that it had spoiled before being prepared as a specimen.

Numenius tahitiensis (Gmelin). BRISTLE-THIGHED CURLEW.—A female bristle-thighed curlew was taken on St. George Island, May 26, 1917.

Although the Eskimo Curlew has been collected on the Pribilofs and the Hudsonian has been reported as having been seen this is the first bird of the genus which has come to my notice during my residence there. It is not likely that either species visits the place except as it may accidentally get out of its regular line of flight.

Archibuteo lagopus sancti-johannis (Gmelin). AMERICAN ROUGH-LEGGED HAWK.—One specimen, unsexed, was secured on St. George Island in the fall of 1917, by Mr. C. E. Crompton of the U. S. Bureau of Fisheries. He has kindly consented to the record being included in this list.

Large hawks are particularly difficult to secure in the arctic tundra country because of the absence of cover for stalking. They have been seen several different times on the Pribilofs, both in spring and fall, during recent years but in every case they were flying high and of course could not be sufficiently well identified to make a specific record of value. This specimen is the first positive evidence that the species occurs. It is entirely probable that several other large hawks may eventually be secured.

Petrochelidon lunifrons lunifrons (Say). CLIFF SWALLOW.—A Cliff Swallow was shot and skinned on St. Paul Island about June 10, 1918, by a native from whom the specimen was secured. This makes the second species of swallow to be collected on the Islands; the Northern Violetgreen was taken in 1914. The barn swallow has also been recorded but not collected.

Plectrophenax hyperboreus Ridgway. McKAY's SNow BUNTING.— Since this species is known to wander from its only breeding place, St. Matthew Island group, to the mainland of Alaska, it has been expected and searched for on the Pribilofs for several years. But it was not definitely known to come until March 30, 1918, when a male in full winter plumage was secured on St. Paul Island. It and a female, which escaped, were found on the top of Rush Hill, the highest point of the Island.

Junco hyemalis hyemalis (Linnaeus). SLATE-COLORED JUNCO.— Two female juncos were secured from a flock of six at North East Point, St. Paul Island, on September 24, 1917. They were feeding about the buildings there, apparently as contented as if they were in the midst of civilization.

Spinus pinus pinus (Wilson). PINE SISKIN—A male Pine Siskin was secured from a flock of twelve found among the North East Point sand dunes, St. Paul Island, on September 24, 1917. The birds seemed to be perfectly satisfied to feed on the seeds of the few ground plants which grow there.

Hylocichla aliciae aliciae (Baird). GRAY-CHEEKED THRUSH.—A female Gray-cheeked Thrush was collected on St. Paul Island, September 9, 1917. It was found feeding on spaded up ground about the Naval Radio Station.

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